

# Finding the Right Enterprise Internet Connectivity Is Key to Post-Pandemic Success

Two years into the pandemic, the new normal is here for many businesses.

New challenges abound for IT leaders, from connecting both a distributed and office-bound workforce to ensuring that cybersecurity is baked into every facet of the new digitalised enterprise. Common among those challenges is the need to find a better way to link employees and customers through an enterprise-grade internet service that provides a high level of coverage, reliability, security and cost effectiveness.

With many employees working remotely, enterprises need to find a better digital pathway to commonly used apps that reside in the cloud or in their own data centres. At the beginning of the pandemic, many simply opened up more virtual private networking connections that ran on private links, such as those using Multiprotocol Label Switching. This may have worked for a while, but as remote working arrangements become part of a permanent hybrid model, enterprises are beginning to grapple with issues of cost and scalability as more users connect from home.

A related issue here is the effectiveness of the hub-and-spoke model, which has been part of the enterprise wide-area network (WAN) for many years. It has become inefficient to force remote users to connect back to their headquarters or branch offices before linking to the cloud or a data centre.

The latency involved in some of these connections adds to a frustrating experience for users and is a drag on the productivity of online collaborative efforts. Think of video calls being disrupted because some users run out of bandwidth or real-time telemetry data from a factory floor arriving late because of latency issues.

## Need for a Better Connection

What many enterprises have done over the years is set up internet breakout links to take the load off a central site, such as headquarters or branch offices. This way, users can directly connect to apps, content and services that are hosted on the public internet using a basic connection from a local internet service provider (ISP). However,



many of these direct internet connectivity options offer only best-effort routing that does not meet more stringent enterprise requirements.

Frequent outages and long restoration times are other common issues for internet services from local ISPs or aggregators. Often, they do not have end-to-end visibility and control of their network and how a customer's traffic is delivered. Nor can they guarantee any predictable performance and response times for applications.

Even with a software-defined WAN (SD-WAN), a popular option today for many enterprises to connect users to the cloud, the quality of the underlying network is critical. If that is suboptimal, the overall performance will not be good: Applications end up being unresponsive, and users will find their connections dropping frequently.

The cost of not having good network quality often outweighs the savings from choosing cheaper internet services. A network brownout, or an unplanned drop in network quality that causes downtime, costs an average of US\$600,000 per year for an organisation in the U.S., according to a study by Netrounds, a network monitoring software provider.<sup>1</sup>

## Internet Links, Built for the Enterprise

This is why many enterprises are looking beyond the ubiquity and low cost of basic internet connectivity options, turning instead to enterprise-grade internet services that are reliable, high performance and secure.

Such services also provide extensive coverage, not just to a country's key cities but also with deep capillarity to other areas where, for example, a factory may be located. Despite the multiple links, a single point of contact for support is also critical here.

For large corporations, this means global coverage, bringing the best connectivity with low latency for teams to work across geography and time zone.

Choosing the right partner is key. Service-level agreements (SLAs), service-level objectives (SLOs) and efficient failover provisions are important considerations even for broadband internet. Enterprises should also consider a service provider that is not just an aggregator but one that has established commercial and operational interlock with ISP partners.

<sup>1</sup> "The True Cost of Network Downtime for Your Business," TechTarget SearchNetworking, May 2020

Five key factors should influence how an enterprise chooses a partner:

- **Coverage:** Does it connect with only the most popular cities, or do its connections fulfil an enterprise's capillarity requirements?
- **Service availability:** How much uptime does the SLA provide for, and what is the mean time to recovery? Does the provider offer service availability SLOs even on broadband internet?
- **Performance:** What is the network latency, and how consistent is the performance? Does traffic get routed via the shortest route all the time?
- **Access to content:** How extensive is connectivity to major cloud and content providers? One or two hops, or more?
- **Security:** Does the provider offer encryption and zero trust access to apps when needed?

Price is also important, to be sure. All these features must be offered at a competitive price for an enterprise to meet its budgetary requirements. Just as important, a trusted telecom partner should be connected to the world's top content providers as well as extensive peering partners. In other words, almost anywhere an enterprise needs to connect to the internet reliably, the telecom partner should be able to provide a trusted link to deliver the performance and reliability required.

For example, a new factory that is set up in an emerging country might need to be connected to offices in the U. S., Europe or other places in the world. Similarly, apps that may be hosted overseas should be easily accessible by users across another continent.

By linking users at each of the locations covered by its enterprise internet services, a trusted partner ensures that all users consistently benefit from a low-latency and high-bandwidth connection that is reliable and secure.

While some service providers may be able to deliver a long-distance link, it is important to gauge the long-haul access cost, routing flexibility, ease of use and performance that can be delivered. Another consideration is how quickly a connection can be set up if, for example, an enterprise is looking to enter a new market and get its offices or factories up and running quickly. Speed is everything in today's business cycles, so it is critical for an enterprise to be able to build up its critical infrastructure with the same agility it leverages for other digital efforts.

## Looking Long Term

Even as the pandemic situation is expected to remain fluid for the year ahead, there is no question that successful enterprises are looking long term. To meet new requirements, many are seeking to rework their enterprise infrastructure, including reengineering applications for the public cloud or data centre.

All these efforts require that the various nodes in a network be well connected, with the necessary coverage, reliability and security built in. A managed offering with enhanced support services will also empower enterprises' digitalisation initiatives.

While the disruption from the pandemic has made many accelerate their digitalisation, those that execute their plans with a trusted connectivity partner will see real results and greater impact. They will emerge from the pandemic with a critical edge over rivals in the same space, delivering greater value to customers.

Find out how Tata Communications can help unlock value with [enterprise-grade internet connectivity services](#).